

AMENDMENTS TO THE CLAIMS

The following listing of the claims replaces all prior versions and listings of the claims in relation to the present application.

Listing of the Claims

1. (Currently Amended) A method for facilitating the authentication of ~~authenticating~~ a document, comprising the steps of:

generating a document key by examining one or more physical attributes of a physical media that underlies the document; and
encoding the document key with an element of an image printed on the physical media to produce an encoded document key, the encoded document key linking the unique physical attribute of the physical media to the image printed on the physical media.
~~imparting an original image onto the physical media such that the original image enables recovery of the document key.~~

2. (Currently Amended) The method of claim 1, comprising: ~~wherein the step of imparting comprises the steps of:~~

generating a digital signature using the document key and a private key that corresponds to the document; and
employing the digital signature to encode the document key.
~~encoding the digital signature into the original image.~~

3. (Currently Amended) The method of claim 1, ~~comprising wherein the step of~~
~~imparting comprises the step of~~ printing the encoded document key on the physical media as
at least a portion of the original image.

4. (Currently Amended) The method of claim 1, ~~further comprising the step of~~ recording
the encoded document key along with a description of the document.

5. (Currently Amended) The method of claim 1, further comprising the step of verifying
the document by performing the steps of:

generating the document key by examining the physical attributes of the
physical media;

obtaining a recovered document key from the encoded document key; ~~original-~~
~~image~~;

comparing the document key to the recovered document key.

6. (Currently Amended) The method of claim 1, wherein the step of generating a
document key comprises the step of examining a paper fiber pattern[[s]] of the physical
media.

7. (Currently Amended) The method of claim 6, wherein the step of examining the paper
fiber pattern[[s]] comprises the step of examining paper fiber patterns in each of a set of
predetermined areas of the physical media.

8. (Currently Amended) The method of claim 1, comprising: ~~wherein the step of imparting comprises the steps of:~~

generating a digital signature using the document key and a shared secret key
that corresponds to the document; and
employing the digital signature to encode the document key.
~~encoding the digital signature into the original image.~~

9. (Original) The method of claim 1, wherein the physical media is paper.

10. (Original) The method of claim 1, wherein the step of generating a document key comprises the step of examining density differences of the physical media.

11. (Original) The method of claim 1, wherein the step of generating a document key comprises the step of examining a unique pattern imparted in the physical media.

12. (Original) The method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a pattern of a reflective substance in the physical media.

13. (Original) The method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a pattern of UV ink in the physical media.

14. (Original) The method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a set of predetermined shapes printed in predetermined positions on the physical media.

15. (Currently Amended) The method of claim 14, further comprising the steps of measuring the predetermined positions and encoding the predetermined positions in the document key.

16-17. (Canceled).

18. (New) A method for facilitating validation of a physical document, comprising:
generating a document key based on a unique physical attribute of a physical media;
encoding the document key with an element of an image printed on the physical media to produce an encoded document key, the encoded document key linking the unique physical attribute of the physical media to the image printed on the physical media; and
storing the encoded document key, the encoded document key being determinable from the physical media and the image printed on the physical media.

19. (New) The method of claim 18, comprising printing the encoded document key on the physical media.

20. (New) The method of claim 18, comprising:
generating a digital signature from the document key; and

tying the document key to the physical media by encoding the digital signature
and the element of the image.

21. (New) The method of claim 18, comprising examining physical patterns in the physical media to determine the unique physical attribute.

22. (New) The method of claim 18, comprising examining physical patterns in the physical media in predetermined areas on the physical media to determine the unique physical attribute.

23. (New) The method of claim 18, comprising examining paper fiber patterns in the physical media to determine the unique physical attribute.

24. (New) The method of claim 18, comprising measuring a location of the element of the image relative to the unique physical attribute and encoding the location with the document key to form the encoded document key.

25. (New) A method for authenticating a physical document, comprising:
generating a document key based on a unique physical attribute of a physical media;
encoding the document key with an element of an image printed on the physical media to produce an encoded document key, the encoded document key linking the unique physical attribute of the physical media to the image printed on the physical media; and

comparing the encoded document key with a previously stored encoded document key to determine whether the encoded document key and the previously stored encoded document key match to indicate that the physical document is authentic.

26. (New) The method of claim 25, comprising retrieving the stored encoded document key from the physical document.

27. (New) The method of claim 25, comprising generating a digital signature from the document key and tying the document key to the physical media by encoding the digital signature and the element of the image.

28. (New) The method of claim 25, comprising examining physical patterns in the physical media to determine the unique physical attribute.

29. (New) The method of claim 25, comprising examining physical patterns in the physical media in predetermined areas on the physical media to determine the unique physical attribute.

30. (New) The method of claim 25, comprising examining paper fiber patterns in the physical media to determine the unique physical attribute.

31. (New) The method of claim 25, comprising measuring a location of the element of the image relative to the unique physical attribute and encoding the location with the document key to form the encoded document key.

32. (New) An apparatus for facilitating validation of a physical document, comprising:
a document key generator adapted to generate a document key based on a
unique physical attribute of a physical media;
an encoder adapted to encode the document key with an element of an image
printed on the physical media to produce an encoded document key, the
encoded document key linking the unique physical attribute of the
physical media to the image printed on the physical media; and
storage media adapted to store the encoded document key, the encoded
document key being determinable from the physical media and the
image printed on the physical media.

33. (New) The apparatus of claim 32, wherein the storage media is paper.

34. (New) The apparatus of claim 32, wherein the encoder is adapted to generate a digital signature from the document key and tie the document key to the physical media by encoding the digital signature and the element of the image.

35. (New) A system for facilitating validation of a physical document, comprising:
means for generating a document key based on a unique physical attribute of a
physical media;

means for encoding the document key with an element of an image printed on the physical media to produce an encoded document key, the encoded document key linking the unique physical attribute of the physical media to the image printed on the physical media; and
means for storing the encoded document key, the encoded document key being determinable from the physical media and the image printed on the physical media.

36. (New) The system of claim 35, comprising means for measuring a location of the element of the image relative to the unique physical attribute and encoding the location with the document key to form the encoded document key.

37. (New). The system of claim 35, comprising means for examining paper fiber patterns in the physical media to determine the unique physical attribute.